

Corrosion of metals and alloys - Accelerated cyclic tests with exposure to acidified salt spray, "dry" and "wet" conditions (ISO 16151:2005)

Corrosion of metals and alloys - Accelerated cyclic tests with exposure to acidified salt spray, "dry" and "wet" conditions (ISO 16151:2005)

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Corrosion des métaux et alliages - Essais cycliques accélérés avec exposition au brouillard salin acidifié, en conditions "seches" et en conditions "humides" (ISO 16151:2005)

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Korozija kovin

Corrosion of metals

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English Version

Corrosion of metals and alloys - Accelerated cyclic tests with
exposure to acidified salt spray, "dry" and "wet" conditions (ISO
16151:2005)

Corrosion des métaux et alliages - Essais cycliques
accélérés avec exposition au brouillard salin acidifié, en
conditions "sèches" et en conditions "humides" (ISO
16151:2005)

Korrosion von Metallen und Legierungen -
Schnellprüfungen unter wechselnder Einwirkung von
saurem Salzsprühnebel, "trockenen" und "feuchten"
Bedingungen (ISO 16151:2007)

This European Standard was approved by CEN on 21 March 2008.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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Foreword

The text of ISO 16151:2005 has been prepared by Technical Committee ISO/TC 156 “Corrosion of metals and alloys” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 16151:2008 by Technical Committee CEN/TC 262 “Metallic and other inorganic coatings” the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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conditions «humides»*

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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 16151 was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*.

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Introduction

Corrosion of metallic materials, with or without corrosion protection, is influenced by many environmental factors, the importance of which may vary with the type of metallic material and with the type of environment. It is impossible, therefore, to design accelerated laboratory corrosion tests in such a way that all environmental factors influencing resistance to corrosion are taken into account. Laboratory tests are, therefore, designed to simulate the effects of the most important factors, which enhance the corrosion of metallic materials.

The accelerated corrosion-test methods described in this International Standard are designed to simulate and enhance the environmental influence on a metallic material to outdoor climates, where exposure to acid rain and to salt-contaminated conditions occur and may promote corrosion. It has been prepared by reference to technical papers and reports (see the Bibliography).

The test methods involve cyclic exposure of test specimens to a mist of acidified-salt solution, to drying conditions, and to periods of high humidity. However, the methods are mainly intended for comparative testing and the results obtained do not permit far-reaching conclusions on the corrosion resistance of the tested metallic material under the whole range of environmental conditions in which they may be used. Nevertheless, the methods provide valuable information on the relative performance of materials exposed to salt/acid rain environments similar to those employed in the test.

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